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Varietal Description of Pearl Altai Wild-Rye

Origin and breeding

Pearl, tested as SC A 3761, was developed at the Swift Current Research Station. It is a four clone synthetic arising from four cycles of recurrent selection. A combination of phenotypic and phenotypic-genotypic selections were used. Phenotypic selection was based on foliage color (glaucousness), seed quality and freedom from leaf spot diseases. Progeny performance in seedling emergence from deep seeding in the greenhouse was also used to make selections.

Varietal characteristics

Pearl is similar to Prairieland in appearance except it is a blue foliage strain. Approximately 75 per cent of the progeny exhibit either a blue or bluegrass foliage color and 25 per cent are green.

Performance

Pearl showed a marked improvement in establishment vigor compared to Eejay and Prairieland. It yields approximately 6 per cent less dry matter than Prairieland but exceeds Prairieland and Eejay in seed yield by 23 per cent and 8 per cent respectively. Greenhouse data show that Pearl had better seedling emergence than Prairieland.

Seed multiplication

Increase will be limited to one generation each of Foundation and Certified classes.

Maintenance of breeder seed

Agriculture Canada Research Station, Swift Current and/or the Agriculture Canada Experimental Farm, Indian Head

Canadian distributor

SeCan Association

Recommended by

Saskatchewan Advisory Committee on Forage Crops

Table 1. Dry matter yield (kg/ha) of Pearl and Prairieland, Western Canada Uniform Trials, 1982-1986

Location	Test Period	No. Station Yrs.	Pearl	Prairieland
Ft. Vermilion	1982-1986	4	6234	6496
Indian Head	1982-1985	3	3170	3124
Lethbridge	1982-1986	4	3659	3949
Mandan	1982-1986	3	5436	6320
Swift Current (dry)	1982-1986	4	1367	1486
Mandan	1983-1986	2	4813	5014
Swift Current (dry)	1983-1986	3	1677	1552
Kamloops	1984-1986	2	1344	1526
Mean		25	3528	3752

Table 2. Seed yields (kg/ha) of Pearl and Prairieland, Western Canada Uniform Trials, 1982-1986

Location	Test Period	No. Station Yrs.	Pearl	Prairieland
Ft. Vermilion	1982-1986	4	333	186
Indian Head	1982-1985	3	410	291
Lethbridge	1982-1986	3	354	272
Mandan	1982-1986	3	285	317
Swift Current (dry)	1982-1986	2	10	30
Mandan	1983-1986	1	189	145
Swift Current (dry)	1983-1986	3	136	112
Mean		19	253	206